

Some like it hot: a look at the coast horned lizard

Picture this: As the late morning sun warms the ground, a prehistoric creature slowly crawls out of his underground lair to bask in the sun. He is fearsome looking and well armed against attack, his body and tail covered in spiny scales, and he sports a large crown composed of six or seven reddish horns projecting devilishly from the back of his head. His body is flattened and tank-like, with a huge round abdomen flanked on both sides by a row of fringe-like scales. Underneath, his belly is bright yellow and cream, while his back is a mottled with brown, rust, cream and black splotches that allows him to blend in to his surroundings amazingly well.

After warming himself in the sun, the reptilian hero begins hunting for his prey — hapless ants and other small insects that wander by. He hunts at a leisurely pace, as he prefers for the food to come to him rather than spending a lot of time and energy zipping around like his more slender lizard cousins do. Later in the day, when he is full of a delicious meal of ants, he will begin looking for a female to impress with a series of vigorous head bobs, pushups and a seductive pawing of the air with his clawed toes. If the female finds this male's antics attractive, she will allow him to flip her on her back and mate with her. If not, she will ignore him and go on her way, or if he is very persistent she may dig a burrow in the soil to escape until he forgets about her and moves on. Hunting, basking and looking for mates continues until the heat of the day becomes too much, at which point our spiky friend will once again retreat underground, where he will nap until it is a more comfortable temperature outside.

This is a typical spring day in the life of the coast horned lizard, *Phrynosoma coronatum*, who roams the hills and valleys of central and southern California. This lizard, which is sometimes mistakenly called a horny toad because of its squat toad-like appearance,



By Jennifer Garrison



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A shorned lizard, above, surveys his land. A puffed-up horned lizard, top right, tries to scare off its human captor. The yellow belly of a coast horned lizard is shown at bottom right. These animals should not be kept as pets, as many die in captivity. The coast horned lizard is a Federal and State Species of Special Concern. The California Department of Fish and Game gives them full protection from collecting, making it illegal to take them from the wild to keep as pets.



PHOTO BY MICHAEL VAN HATTEM



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lives its life in tune with the sun. It doesn't bother getting up until it is warm and sunny outside, and sensibly takes a siesta on hot afternoons. During the cold winter days, it will hibernate underground to avoid the chill. Anyone who spends time in Livermore can appreciate the brilliance of this lifestyle. And of course, any creature that eats ants is surely a welcome guest in most neighborhoods.

An adult coast horned lizard is about four inches long, and seems almost circular when viewed from above. Its stomach is so large because it must consume a

lot of ants to get enough calories to survive (ants are mostly exoskeleton). In addition, females carry a lot of eggs in that round belly, with single clutches ranging from six to 21 eggs. These eggs are laid in nests created in loose soil in April - June, and the tiny spiky hatchlings appear in July or August.

Because it has such a large stomach, the horned lizard cannot run fast to get away from predators (such as loggerhead shrikes, roadrunners, coyotes and foxes). It makes up for this awkwardness by being a good master of disguise. It is virtually impossible to see a horned lizard sitting still from a distance of more than a couple

of feet. The best way to spot a horned lizard is when it dashes away when you get too close. They will almost always stop within a few feet and sit still again. If you are watchful, you can follow it and get a good long look. Should its camouflage fail, the horned lizard's dangerous looking armaments will protect it from many predators. Those that persist in attacking may be repelled by foul tasting blood it squirts from its eyes as a last defense.

Coast horned lizards spend most of their time in open areas with plenty of sun and ants. They live in a wide variety of habitat types, from conifer forests and riparian woodlands to grasslands and chaparral scrub. Around the Tri-Valley area, they can be seen basking in the sun on Mount Diablo, the Altamont hills, San Joaquin Valley and on Site 300 fire trails. The coast horned lizard, once common, is now reduced in number because of habitat loss due to development, pesticide use (which reduces its insect prey), pre-

dation by domestic cats, collection by the pet industry and its bad habit of sun bathing on the side of the road. Because it relies on blending in with its surroundings, the coast horned lizard often does not move when approached by predators. However, in the case of an encounter with an automobile this proves to be a poor adaptation, and lizard mortality is high along roadsides. So drive carefully this spring and summer, stay off the roadsides, and keep an eye out for our ant-eating friends.